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Atty Dkt. No.: 10004452-1
USSN: 10/017,107

include U.S. Patent Nos: 4,877,745; 5,338,688; 5,474,796; 5,449,754; 5,658,802 and
5,700,637.

IN THE DRAWINGS

Applicants request the Examiner's approval of the proposed corrections to figure 1 and 2 provided in attached copies of these figures as indicated in red. Stopper 12 is now shown in the figures at the location indicated by the context of the application (for example in paragraph 19) and as would be appreciated by one with skill in the art upon review of the figures.

IN THE CLAIMS

Please amend claims 1, 3, 4, 6, 7, 16, 18, 20, and 26 as follows. The remainder of the pending claims are also presented herein for the Examiner's convenience.

1. (Amended) A printing system comprising:
a pulse-jet printhead including a nozzle, a manometer and lines configured to connect said printhead and manometer in parallel to a fluid source to be connected to a variable pressure compensation source, wherein said system is adapted to vary an output of said variable pressure compensation source to maintain a fluid level within said manometer in a predetermined range to maintain fluid pressure at said nozzle within a corresponding range.
2. The system of claim 1, further comprising a fluid source.
3. (Amended) The system of claim 2, further comprising a sensor to generate a signal in response to the fluid level within said manometer, and a control unit which generates a control signal for said variable pressure compensation source in response to said sensor signal.
4. (Amended) The system of claim 1, further comprising a variable pressure compensation source.
5. The system of claim 1, further comprising a first valve at an exit of said manometer.
6. (Amended) The system of claim 1, further comprising a second valve at an entrance to a fluid reservoir.
7. (Amended) The system of claim 6, further comprising a supply vessel to feed a print medium to said fluid source, wherein the system is adapted for said feeding to occur during use of said pulse jet nozzle.
8. The system of claim 1, further comprising a print medium.
9. The system of claim 8, wherein said print medium comprises a biopolymers or precursor thereof.

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10. A method of maintaining a desired pressure of a print medium at a pulse-jet nozzle comprising:

providing a system comprising a manometer connected to a fluid reservoir in parallel with said nozzle;

applying pressure to said fluid reservoir;

monitoring a fluid level in said manometer; and

adjusting said pressure applied to said fluid reservoir in response to changes in said manometer level.

11. The method of claim 10, wherein said pressure applied is negative pressure.

12. The method of claim 10, wherein said pressure applied is positive pressure.

13. The method of claim 10, further comprising attaching a fluid supply vessel to said fluid reservoir, and feeding a print medium from said fluid supply vessel to said fluid reservoir,

14. A printing system comprising:

a pulse-jet printhead, a pressure gauge and a reservoir having an inlet line and an outlet line, said inlet line capped by a valve for connection to a fluid supply and said outlet line in fluid communication with said printhead.

15. The system of claim 14, wherein said pressure gauge comprises a manometer.

16. (Amended) The system of claim 15, further comprising a fluid supply reservoir.

17. The system of claim 16, wherein said supply vessel is connected to said reservoir via a supply vessel line connected to said valve.

18. (Amended) A method of replenishing a pulse-jet reservoir comprising:

providing a system as described in claim 17.

connecting said fluid supply vessel to said reservoir;

opening said valve, and

feeding print medium from said fluid supply vessel to said reservoir.

19. The method of claim 18, wherein said supply vessel is connected to said reservoir via a supply vessel line connected to said valve.

20. (Amended) The method of claim 19, wherein said print medium is fed under pressure to said reservoir during use of said pulse-jet nozzle.

21. The method of claim 20, wherein gauge pressure is monitored and pressure compensation is applied to maintain said pressure within a desired range.

22. The method of claim 20, wherein said pressure gauge comprises a manometer.

23. The method of claim 20, wherein said print medium a biopolymer or precursor